Model 8256

3U VPX SOSA aligned development platform

Ideal for Mercury's SOSA aligned RFSoC based Quartz boards

- High-bandwidth data streaming
- Waveform signal generator
- Communication receiver and transmitter
- Electronic Warfare transponder
- Analog I/O for digital recording and playback
- Sensor interfaces

The 8256 is a SOSA aligned 3U VPX chassis ideal for application development with Mercury's RFSoC based Quartz® data acquisition and processing boards. Working with our partners Elma Electronics Inc. and Crossfield Technologies LLC, the 8256 is designed to adhere to the emerging SOSA standard. It is a perfect platform for integrating Mercury's RFSoC based Quartz products with other SOSA aligned boards like the SOSA aligned SBCs from Concurrent Technologies and 40 gigabit Ethernet switch from Interface Concept.

The chassis backplane provides slots for up to four 5550 or 5553 Quartz RFSoC boards, a 5503 multi-board synchronization board, an SBC (Single Board Computer), Ethernet switch board, and a timing board. The 8256 also features a VITA 46.11 compliant chassis management controller.

The 8256's built-in forced-air cooling is designed to support conduction-cooled boards in a standard 19-inch rackmount profile chassis. This provides the convenience of development on the conduction-cooled boards in a desktop or laboratory environment.

FEATURES

- Developed in alignment with the SOSA™ Technical Standard
- Ideal development platform for Mercury's Quartz Models 5550 and 5553 8-Channel A/D & D/A Zynq UltraScale+ RFSoC Processors
- 8 slots provide space for a range of acquisition and processing boards
- Optional rear panel RF and optical connections
- Free lifetime applications support

SOSA™ Sensor Open Systems Architecture

CHASSIS MANAGEMENT

Mercury's SOSA aligned development chassis utilizes Crossfield Technology LLC's VITA 46.11 and HOST aligned Chassis Management Module (CMM). This CMM is software upgradeable to the forthcoming SOSA v1.0 Technical Standard. In SOSA aligned systems, the CMM will enable integration among SOSA functional elements, the System Manager, Plug-In Cards, and intelligent power supplies.

CONVENIENT ACCESS TO RF AND OPTICAL INTERFACES

The 8256 is designed for convenient access to RF and optical interfaces. Each RF payload slot can be optioned with 20 coaxial breakout connectors located on the back panel of the chassis, providing direct connections to the VITA 67.3C backplane connector. In addition, each RF payload slot can be optioned with two rear panel MPO adapters to provide access to the VITA 67.3C dual optical interfaces.

SPECIFICATIONS

Dimensions: 6U Chassis, 19" W x 17.25" D x 10.5" H
Weight: 28.2 lb
Power Supply: 964 Watts
Operating Temp: 0° to +50° C
Storage Temp: -40° to +85° C
Relative Humidity: 5 to 95%, non-condensing
Power Requirements: 60 Hz to 100 to 240 VAC, 50 to 60 Hz

ORDERING INFORMATION

Model	Description
8256	SOSA Aligned 3U VPX Development Platform

Options	Description
-101	Installs VITA 67.3C interface in Slot 1
-102	Installs VITA 67.3C interface in Slot 2
-105	Installs VITA 67.3D interface in Slot 5
-106	Installs VITA 67.3C interface in Slot 6
-107	Installs VITA 67.3C interface in Slot 7

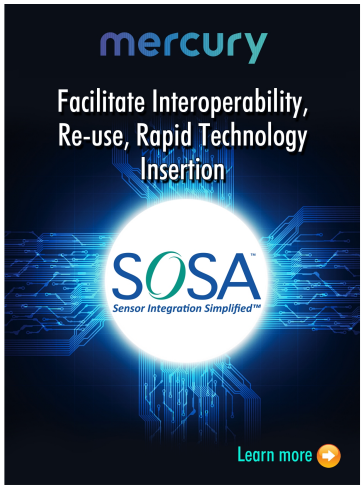
Contact Mercury for compatible option combinations and complete specifications.

SOSA ALIGNED COMPANION PRODUCTS

Model	Description
5550	8-Channel A/D & D/A Zynq UltraScale+ RFSoC Processor
5553	8-Channel A/D & D/A Zynq UltraScale+ RFSoC Gen 3 Processor
5901-550	Rear Transition Module for 555x

LEARN MORE ABOUT SOSA

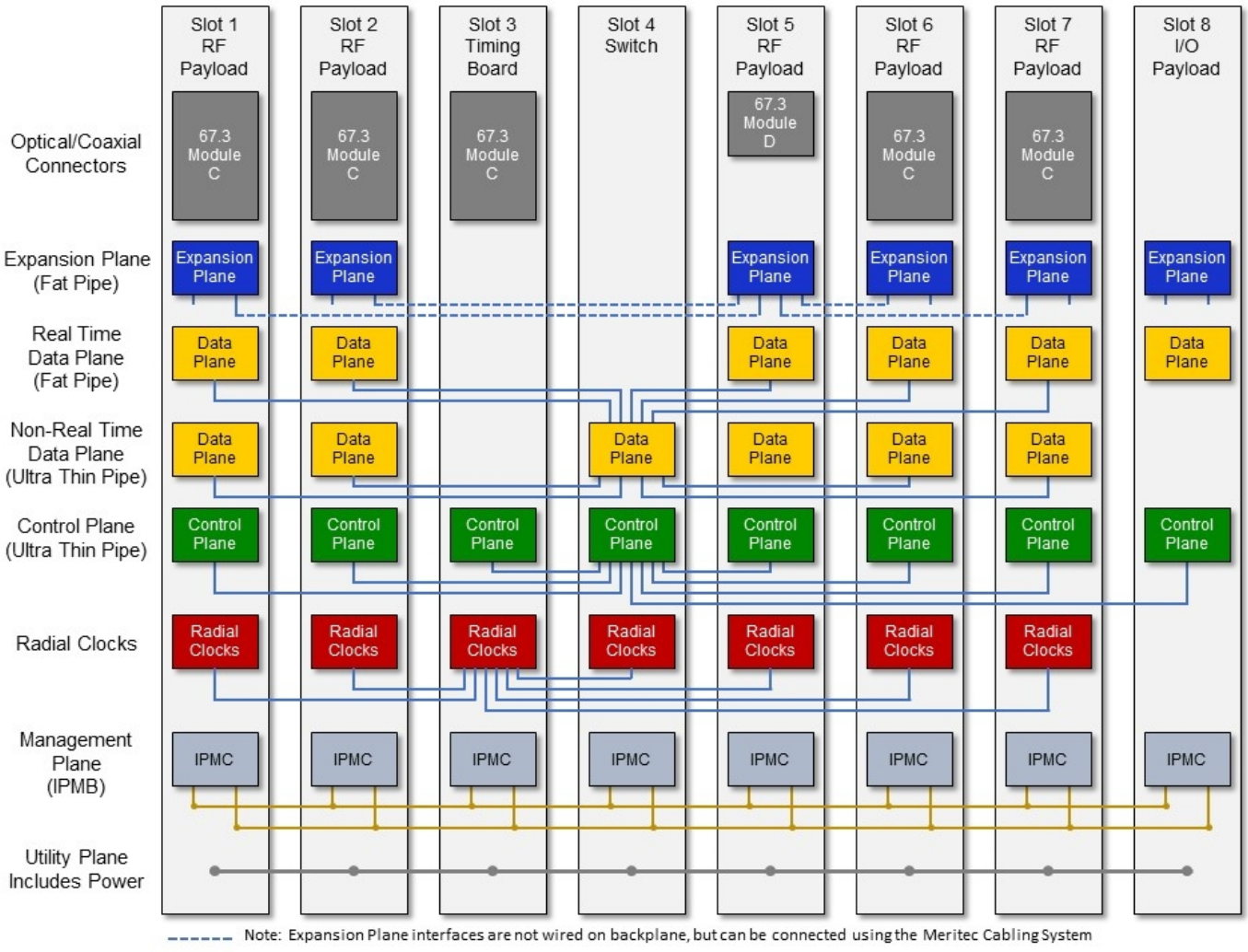
Click below to learn more about SOSA.

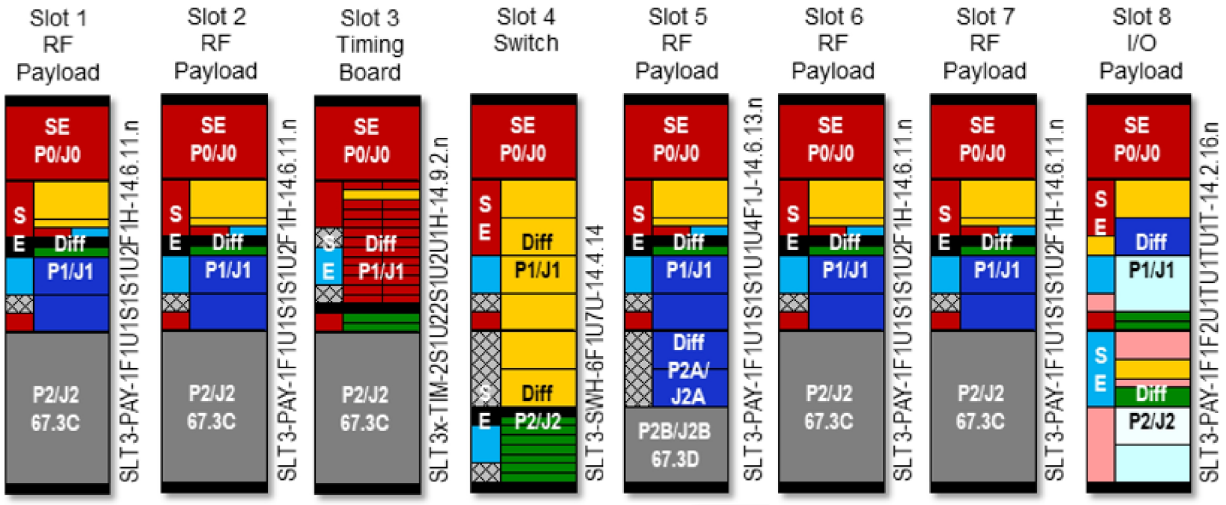


LIFETIME SUPPORT FOR QUARTZ PRODUCTS

Mercury offers the worldwide military embedded computing community shorter development time, reliable, rugged solutions for a variety of environments, reduced costs, and mature software development tools. We offer free lifetime support from our engineering staff, which customers can depend on through phone and email, as well as software updates. Take advantage of our 40 years of experience in delivering high-performance radar, communications, SIGINT, EW, and data acquisition MIL-Aero solutions worldwide.

MODEL 8256 BACKPLANE AND SLOT PROFILES





MODEL 8256 DEMO VIDEO

Click or scan below to view a video demo of the 8256.

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Learn more

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